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REMARKS

Claims 1-24, 26-28, and 30-33 remain in the application with claims 1 and 17 in independent form. Claims 25 and 29 have been cancelled.

The Applicant has amended paragraph [0008] of the specification such that the objection to the disclosure is overcome.

Claims 1-33 stand rejected under 35 U.S.C. §§ 102 and/or 103 in view of various prior art references. More specifically, claims 1-3, 6 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rittri et al. (U.S. Patent No. 6,790,259) in view of Jorder et al. (U.S. Patent No. 6,527,834). Claims 1-3, 6 and 7 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rittri et al. in view of Jorder et al., and further in view of Backus (U.S. Patent No. 5,133,788). Claims 17, 19 and 23 stand rejected under 35 U.S.C. § 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Jorder et al. Claims 4, 5, 20, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art as applied by the Examiner to claims 3 and 19, and further in view of Volodina et al. (U.S. Patent No. 5,474,600). Claims 8-10, 12-15, 22, 24-26, and 28-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art as applied by the Examiner to claims 1 and 17, and further in view to Joannou (U.S. Patent No. 6,497,754). Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Jorder et al. in view of Rittri et al. Claims 11 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art as applied by the Examiner to claims 9 and 25, and further in view of Sugita et al. (U.S. Patent No. 4,750,921). Finally, claims 16 and 33 stand rejected under 35 U.S.C. § 103(a) as being

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unpatentable over the prior art as applied by the Examiner to claims 1 and 17, and further in view of Masuda et al. (U.S. Patent No. 4,509,958).

Independent Claim 1:

Independent claim 1 has been amended to clarify the present invention in the context of the claimed portable air filtration system. As such, claim 1 defines a portable air filtration system comprising, among other components, a filter housing, an intake fan, an ionizing mechanism, a filter media, and a conductive coating. The conductive coating is, more specifically, applied to an upstream side of the filter media to establish an electric field between the ionizing mechanism and the conductive coating. The claim, as amended, recites that the conductive coating is electrically-connected to both ground and to the filter media. As a result of both of these electrical connections, the upstream side of the filter media is electrically-connected to ground *through the conductive coating* and the negative charge of particles entrapped within the filter media can be dissipated.

Independent claim 1 now recites that the claimed portable air filtration system is a combination focusing not only on the application of the conductive coating to the filter media, but also on the location where the conductive coating is applied and the electrical connections established between ground and the filter media due to the application and electrical conductivity of the coating. That is, the conductive coating must be applied to the upstream side of the filter media whereby the electrical field is established between the ionizing mechanism and the conductive coating, and the conductive coating must be electrically-connected to ground and to the filter media such that the upstream side of the filter is electrically connected to ground

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through the conductive coating. As explained in paragraph [0011] in the Summary of the Invention section of the original specification, the portable air filtration system of the present invention including the conductive coating eliminates the need for a separate control electrode and ground electrode. Furthermore, the conductive coating enables simplification of the required componentry and provides a two-fold function of (1) establishing the electrical field with the ionizing mechanism and (2) providing a ground for dissipating the charges in the filter media.

As alluded to above, independent claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rittri et al. in view of Jorder et al. and also under § 103(a) as being unpatentable over a combination of the same prior art, and further in view of Backus. However, as described below, Rittri et al., Jorder et al., and Backus either alone or in combination, do not disclose, teach, or suggest the invention as claimed in amended independent claim 1.

In contrast, the air filtration system disclosed in Rittri et al. does not include an electrode, which the Examiner equates to the claimed conductive coating, electrically-connected to the filter media. Instead, referring to Figure 1 of Rittri et al., the electrode (or grid) 6 is clearly spaced from and not electrically connected to the filter 2. In fact, claims 6 and 9 of Rittri et al. make clear that the grid 6 is "electrically isolated". Rittri et al. does describe, in one embodiment, where the grid is actually in contact with an upstream side of the filter 2. However, in this particular embodiment, the grid 6 is not electrically-connected to ground which is another element claimed in amended claim 1 of the present application. Furthermore, there is

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no disclosure, teaching, or suggestion, within Rittri et al. that would motivate one of ordinary skill in the art to replace its conventional electrode, i.e., the grid 6, with a conductive coating.

Jorder et al. similarly does not disclose, teach, or suggest the combination claimed in amended independent claim 1. As the Examiner recognizes, Jorder et al. does disclose use of a conductive coating. However, contrary to the Examiner's indication, Jorder et al. does not teach use of a conductive coating instead of a conductive grid. To this end, Jorder et al. makes no comment whatsoever that its conductive coating is used in lieu of a conductive grid. Therefore, there is no motivation within Jorder et al. that teaches or suggests that it would be appropriate to combine its conductive coating with the particular air filtration system of Rittri et al. Further, there is also no recognition whatsoever in Jorder et al. that the required electric field be established between an ionizing mechanism and the conductive coating such that the filter media is down stream from the electric field and not susceptible to catching on fire. There is also nothing disclosed, taught, or suggested in Jorder et al. that indicates that its conductive coating on its filter is actually electrically-connected to ground as required by amended independent claim 1.

In view of the amendments to independent claim 1 and the remarks set forth above, it is respectfully submitted that Rittri et al. and Jorder et al. are not appropriately combinable to arrive at a proper § 103(a) rejection. There is no motivation to appropriately combine the two references. Thus, it is respectfully submitted that the Examiner's rejection of independent claim 1 relying on Rittri et al. and Jorder et al. is overcome.

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As for the additional § 103(a) rejection relying further on Backus, this rejection is overcome for the same reasoning discussed above. More specifically, the disclosure and teachings of Backus do not remedy the deficiencies of Rittri et al. and/or Jorder et al. Thus, the Examiner's § 103(a) rejection relying on Rittri et al. in view of Jorder et al., and further in view of Backus is also overcome and it is respectfully submitted that independent claim 1 is allowable. Furthermore, claims 2-16 depend, either directly or indirectly, from independent claim 1 such that these claims are also allowable.

Independent Claim 17:

Independent claim 17 has been amended to clarify the present invention in the context of the claimed filter for use in the air filtration system. Claim 17, as amended, comprises a filter media and a conductive coating applied to the filter media. More specifically, the conductive coating is applied to the filter media in a continuous pattern for dissipating a charge of particles entrapped within the filter media wherein the continuous pattern of the conductive coating includes a plurality of strands. Each of the strands are spaced, as claimed, from 3 to 20 millimeters from an adjacent strand. Referring to paragraph [0044], this spatial relationship between the strands is important to maintain the efficiency of the filter media and to ensure that the conductive coating itself can effectively function as a ground electrode.

For the Examiner's benefit, independent claim 17 has been amended to incorporate the elements originally claimed in dependent claims 25 and 29. As such, the Applicant respectfully traverses the Examiner's 35 U.S.C § 103(a) rejection at the threshold of original dependent claim 25 which can found in paragraph 11 on page 5 of the Office Action. Here, the Examiner

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contends that claims 25 and 29, which are now included in amended independent claim 17, are unpatentable in view of the prior art as applied to claims 1 and 17 and further in view of Joannou.

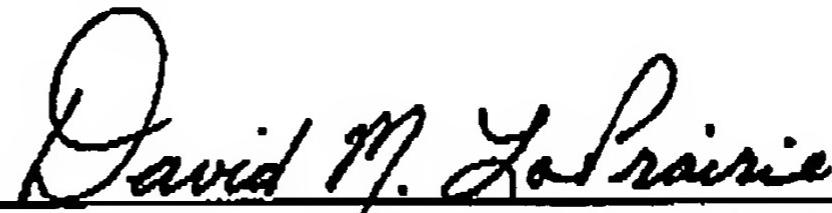
The prior art, including Jorder et al., Rittri et al., Backus, and Joannou either alone or in combination, does not disclose, teach or suggest the claimed spatial relationship between strands of the continuous pattern of the conductive coating. Referring to paragraph 11 on page 5 of the Examiner's Office Action, the Examiner refers to column 1, line 5 to column 2, line 9 and also to column 3, line 46 to column 5, line 27 of Joannou. However, after reviewing these sections of Joannou as well as the other prior art references, it is apparent that there is no disclosure, teaching, or suggestion of spacing from 3 to 20 millimeters between adjacent strands of a continuous pattern of a conductive coating. Thus, original dependent claim 25 (and now amended independent claim 17) is not appropriately rejected under § 103(a). It is, therefore, respectfully submitted that amended independent claim 17 is also allowable and that remaining claims 18-24, 26-28, and 30-33, which all depend from independent claim 17, are also allowable.

It is respectfully submitted that the application, as amended, is now presented in condition for allowance, which allowance is respectfully solicited. The Commissioner is authorized to charge our deposit account no. 08-2789 for any additional fees or credit the account for any overpayment.

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Respectfully submitted,

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